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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,600	11/21/2003	Kai Mustonen	60279.00067	8208

32294 7590 10/23/2007
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EXAMINER

PATEL, CHANDRAHAS B

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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10/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/717,600

Applicant(s)

MUSTONEN ET AL.

Examiner

Chandahas Patel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 12-16, filed 8/31/2007, with respect to the rejection(s) of claim(s) 22-42 under 35 U.S.C. 102 and 103 have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of same references.

Newly added claims necessitated finality of this rejection.

Examiner withdraws objection to drawings in light of amendments.

Examiner withdraws objection to claims 22 and 33 in light of amendments.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 44 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. IP address is a data structure since it is logical arrangement of bytes to identify network device. The data structure as indicated by MPEP is non-statutory (See MPEP 2106.01).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 22-25, 28-36, 39-43 rejected under 35 U.S.C. 103(a) as being unpatentable over Tiuri (USPN 6,829,230).

Regarding claim 22, Tiuri teaches a method comprising: generating unique IP address from the geographical location data [**Abstract**], wherein the IP address has a global prefix portion and a local suffix portion, and wherein the geographical location information is coded in the prefix part of the address [**Col. 6, lines 10-16**].

Tiuri discloses the claimed invention except for geographical location information is coded in the suffix part.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to code the geographical information into suffix part of the IP address since it has been held that rearranging parts of an invention involves only routine skilled in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

Regarding claims 23 and 34, Tiuri teaches the geographical location is a three dimensional coordinate [**Abstract**].

Regarding claims 24 and 35, Tiuri teaches the geographical location is a two dimensional coordinate [**Abstract**].

Regarding claims 25 and 36, Tiuri teaches the geographical location information includes additional information [**Col. 4, lines 59-67**].

Regarding claims 28 and 39, Tiuri teaches the address assigned to a mobile device comprises the device number and geographical location information of the router to which the mobile device is connected to [**Col. 4, lines 27-44**].

Regarding claim 29, Tiuri teaches the geographical location information is automatically detected [**Col. 2, lines 29-32**].

Regarding claim 30, Tiuri teaches geographical location information is manually entered [Col. 2, lines 16-18].

Regarding claim 31, Tiuri teaches the addressing of subnets of the network is based on the geographic location of the routers [Col. 6, lines 13-15, **prefix of the address has subnet information**].

Regarding claim 32, Tiuri teaches the address are used to improve the network performance by using the geographic location information directing the radio signal to destination when radios are used in physical layer [Col. 4, lines 59-67 – Col. 5, lines 1-9].

Regarding claim 33, Tiuri teaches a router for routing IP packets [Col. 4, lines 13-20] in which the unique address is based on geographical location information [**Abstract**] and has a global prefix portion and a local suffix portion, wherein the router is configured to harness the geographic location information coded to the prefix portion of the address in routing packets to the destination nodes located in the subnetwork [Col. 6, lines 10-16].

Tiuri discloses the claimed invention except for geographical location information is coded in the suffix part.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to code the geographical information into suffix part of the IP address since it has been held that rearranging parts of an invention involves only routine skilled in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

Regarding claim 40, Tiuri teaches the router is configured to query the geographical location information from the client attached to the network [Col. 2, lines 29-32].

Regarding claim 41, Tiuri teaches the router is configured to assign the geographic location information and terminal device number to client attached to the network [Col. 4, lines 27-44].

Regarding claim 42, Tiuri teaches the router is configured to utilize the geographic location information in directing the radio signal to destination when radios are used in physical layer [Col. 4, lines 57-67 – Col. 5, lines 1-9].

Regarding claim 43, Tiuri teaches an apparatus comprising: generating means for generating unique internet protocol address from the geographical location data, wherein the internet protocol address has a global prefix portion and a local suffix portion, and wherein the geographical location information is coded in the prefix part of the address [Col. 6, lines 10-16].

Tiuri discloses the claimed invention except for geographical location information is coded in the suffix part.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to code the geographical information into suffix part of the IP address since it has been held that rearranging parts of an invention involves only routine skilled in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

Regarding claim 44, Tiuri teaches a unique IP address comprising: a global prefix portion and a local suffix portion, wherein the unique internet protocol address is generated from geographical location data of one of a node and a router connected to the node, and wherein the geographical location information is coded in the prefix part of the unique internet protocol address [Col. 6, lines 10-16].

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Tiuri discloses the claimed invention except for geographical location information is coded in the suffix part.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to code the geographical information into suffix part of the IP address since it has been held that rearranging parts of an invention involves only routine skilled in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

Regarding claim 45, Tiuri teaches a routing component for routing IP packets, wherein a unique IP address is based on geographical location information of one of the routing component and a node connected to the routing component, and wherein the unique IP address has a global prefix portion and a local suffix portion, wherein the routing component is configured to utilize the geographic location information, the geographic location information being coded to the prefix portion of the unique IP address, in routing packets to destination nodes located in a subnetwork [Col. 6, lines 10-16].

Tiuri discloses the claimed invention except for geographical location information is coded in the suffix part.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to code the geographical information into suffix part of the IP address since it has been held that rearranging parts of an invention involves only routine skilled in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

Regarding claim 46, Tiuri teaches a system for routing IP packets, the system comprising: a router configured to route data packets between internet and a subnetwork [Fig. 1, 5], the subnetwork comprising a group of nodes [Fig. 1, 4], wherein a unique IP address is based

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on geographical location information of one of the router and one node of the group of nodes, wherein the unique IP address has a global prefix portion and a local suffix portion, the router being configured to utilize the geographic location information, the geographic location information being coded to the prefix portion of the unique IP address, in routing packets to destination nodes located in the subnetwork [Col. 6, lines 10-16].

Tiuri discloses the claimed invention except for geographical location information is coded in the suffix part.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to code the geographical information into suffix part of the IP address since it has been held that rearranging parts of an invention involves only routine skilled in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

5. Claims 26 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiuri (USPN 6,829,230) in view of Dobbins et al. (USPN 6,249,820, Herein as Dobbins) and Bialk et al. (USPN 6,952,729, Herein as Bialk).

Regarding claims 26 and 37, Tiuri teaches the additional information is node specific information such as terminal number [Col. 4, lines 41-43], node name [Col. 6, lines 14-16].

However, Tiuri does not teach the additional information includes node layer information, street address, serial number, color or weight.

Dobbins teaches additional information includes node layer information [Col. 3, lines 24-29]. Bialk teaches additional information includes street address, serial number, color or weight [Col. 10, lines 51-55].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include node layer information to enhance security [Col. 3, lines 23-25] and include street address, serial number, color or weight so that number of customers can be determined from the address header [Col. 10, lines 56-58].

6. Claims 27 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiuri (USPN 6,829,230) in view of Orsic (USPN 6,147,986).

Regarding claim 27, Tiuri teaches a method as discussed in rejection of claim 22.

However, Tiuri does not teach the address assigned to a mobile device is updated when the mobile device moves and the new address is informed to the register that controls the location of a mobile device.

Orsic teaches the address assigned to a mobile device is updated when the mobile device moves and the new address is informed to the register that controls the location of a mobile device [Col. 3, lines 26-35].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to update the address of a mobile device when its moves to different location so that mobile device can communicate when it goes to different location which cannot be served by serving router [Col. 3, lines 26-35].

Regarding claim 38, Tiuri teaches a method as discussed in rejection of claim 33.

However, Tiuri does not teach the router is configured to update the address assigned to a mobile device when the mobile device moves.

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Orsic teaches the router is configured to update the address assigned to a mobile device when the mobile device moves [Col. 3, lines 26-34].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to update the address assigned to a mobile device when mobile device moves so that the mobile device can be served when it goes into the area of router served by different router [Col. 3, lines 26-34].

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is 571-270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CBP


CHIRAG G. SHAH
PRIMARY PATENT EXAMINER